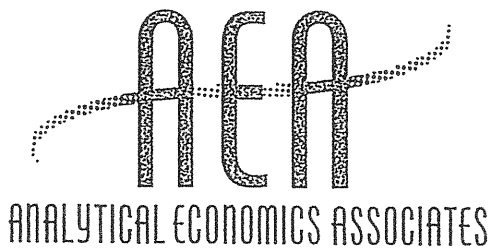


App'x 2



Supplemental  
Economic Expert Report of:  
Josefina V. Tranfa-Abboud, Ph.D., CFE, MAFF

In the Matter of:

*Thomas M. Moran*

v.

*MTA Metro-North Railroad Company, et al.*

United States District Court  
Southern District of New York  
19-CV-03079-AT

August 18, 2021



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## I. Introduction and Background to the Assignment

I am Josefina V. Tranfa-Abboud, Ph.D., CFE, MAFF, President and Chief Economist of Analytical Economics Associates LLC (AEA). AEA is a consulting firm based in Morristown, NJ dedicated to the evaluation and estimation of economic damages in legal disputes. My qualifications and credentials include a Doctor of Philosophy (Ph.D.) degree in Economics from Florida State University (Tallahassee, Florida) and a Bachelor of Science degree in Economics from Universidad Central de Venezuela (Caracas, Venezuela). I hold a Certified Forensic Examiner (CFE) license awarded by the Association of Certified Fraud Examiners (ACFE), and a Master Analyst in Financial Forensics (MAFF) license awarded by the National Association of Certified Valuators and Analysts (NACVA). My Curriculum Vitae is attached to this report as Exhibit "A".

As discussed in the "Economic Expert Report of Josefina V. Tranfa-Abboud, Ph.D., CFE, MAFF" dated March 9, 2020 ("the Tranfa-Abboud 2020 report"), I have been asked by The Law Offices of Steve S. Efron, counsel for MTA Metro-North Railroad Company ("MTA-MN"), to provide my opinion regarding the analysis of alleged economic damages put forth by Steven J. Shapiro, Ph.D. (Dr. Shapiro) as set forth through Expert Report Concerning Thomas Moran's Lost Earnings Capacity dated December 14, 2019 and the Supplemental Expert Report Concerning Thomas Moran's Lost Earnings Capacity dated January 31, 2020 (jointly referenced hereby as "Dr. Shapiro's report") and to provide analysis and professional opinion regarding the potential economic damages to Mr. Thomas Moran ("Mr. Moran") in connection with this litigation.

The analysis delineated in the Tranfa-Abboud 2020 report predates two important events that are independent of one another, that are unrelated to the claims in this litigation, and which would have likely affected Mr. Moran's work hours and, hence, his total compensation: (1) the unique circumstances surrounding year 2020 in connection with the COVID-19 pandemic and related closures affecting ridership and service supply and demand, and (2) the recent policy changes implemented by the MTA geared towards reducing the amount of Overtime Pay and its effects on the MTA budget.

This supplemental report has been prepared in light of these two significant events and pursuant to the request by counsel for the MTA-MN to provide an updated analysis of Mr. Moran's alleged economic damages.

It is important to note that the effects of the COVID-19 pandemic as well as the implementation of overtime-related policies by the MTA continue to evolve, and therefore, it is necessarily the case that the data that is currently available does not capture all the effects of these events. As the circumstances of the COVID-19 pandemic allow for a return to a higher level of normalcy, the supply and demand of public transportation will likely change, and the effects on the overtime pay of MTA employees will also likely change. In similar fashion, as the overtime-related policies by the MTA continue to be implemented, the effects of these policies on the hours worked by employees of the MTA will likely continue to change.

Accordingly, it may take some time before the data necessary for a more detailed analysis becomes available. Therefore, the analysis presented hereby is based on the best data available to date.

Contingent on the future availability of further data, my analysis and this report may be further supplemented, if requested.

Section II of this report provides the list of the additional documents received after the Tranfa-Abboud 2020 report was issued. The summary of the analysis and results is presented in Section III. Section IV presents the details of the updates incorporated into the analysis of Mr. Moran's alleged economic damages.

## II. List of Additional Documents

The following records have been reviewed over the course of this engagement and have been considered in forming my opinions:

1. Addendum letter report re: Thomas Moran by the Medical Board, signed by Joseph Bottner, MD (Metropolitan Transportation Authority) and David D' Souro, MD (Mount Sinai Beth Israel) dated March 2, 2021.
2. MTA Annual Report on Overtime (FY 2020 Review) dated March 2021.
3. Email correspondence from Steve Weiss, Financial Liaison, MTA Metro-North Railroad, MTA Office of the Chief Financial Officer, dated July 30, 2021, containing overtime pay data for Thomas Moran for years 2014-2017, and Metro-North Railroad overtime statistics for the period 2018 through July 2021.

### III. Summary of Updated Analysis and Results

The analysis and opinions delineated in this report regarding the alleged potential economic damages to Mr. Moran are based on the facts and information extracted from the records, documents, and information available to date. The results of the analysis presented in this report are to be considered supplemental to the results presented in the Tranfa-Abboud 2020 report.

As discussed in the Tranfa-Abboud 2020 report, the estimated amount of Mr. Moran's alleged potential economic damages is based on the premise of a finding of liability, and based on the assumption that, in the absence of the alleged wrongdoing, Mr. Moran may have continued to work for the MTA Metro-North Railroad ("MTA-MN") in the same capacity as Conductor until his age of eligibility for retirement.

As will be discussed in more detail in the sections that follow, the analysis presented here is based on assumptions that have been established based on the data available to date to estimate the potential effects that COVID-19-related closures and current overtime related policies by the MTA may have had on Mr. Moran's potential compensation.

One of the central assumptions in the analysis presented in the Tranfa-Abboud 2020 report was that Mr. Moran may have continued to earn "Extra Wages" (which includes Overtime Pay) at a rate consistent with his historical earnings records. However, the analysis presented in the Tranfa-Abboud 2020 report predates the COVID-19-related MTA-MN service supply and demand changes and the implementation of the current MTA policies that are geared towards the control of overtime.

The analysis presented hereby takes into account the fact that the COVID-19-related closures and the current MTA policies geared towards the control of overtime would have likely impacted Mr. Moran's hours worked and resulting compensation. More specifically, it is likely that Mr. Moran's Overtime Pay may have declined significantly starting in March 2020.

As will be discussed in more detail in later sections of this report, based on historical data, Mr. Moran earned “Extra Wages” that represented a 77.6% premium over his Base Wages (including Overtime Pay). The amount of Mr. Moran’s historical Overtime Pay (which is included as part of his “Extra Wages”) represented a 62.8% premium over his Base Wages for the period 2014-2016.

The analysis presented here is based on the assumption that, as a result of the effects of COVID-19 and the MTA policies on overtime, the amount of Mr. Moran’s Overtime Pay may have been reduced to be equivalent to a 19% premium over his Base Wages in years 2020 and 2021, and increased to reach a 50% premium over his Base Wages in years 2022 and 2023. Based on the board-mandated 5% reduction in overtime expenditures, it is further assumed that from year 2024 forward, the amount of Mr. Moran’s Overtime Pay may have increased further to be equivalent to a 57.8% premium over his Base Wages, i.e., five percentage points below Mr. Moran’s historical average premium of 62.8% over his Base Wages.

It is important to note that these assumptions are solely intended to provide an illustration of the potential effects that COVID-19 and the MTA policies on overtime may have had on Mr. Moran’s Overtime Pay and resulting total compensation. This illustration is offered in the interim that further data becomes available. Accordingly, the results of this illustrative analysis may change if/when further detailed data is provided.

Based on the above, and in the event of a finding of liability, it is my professional opinion that the estimated amount of Mr. Moran’s economic damages is as follows:



UPDATED as of August 18, 2021

Summary of Economic Damages in Nominal Terms

|  | <u>Age 60</u>      | <u>Age 62</u>      |
|--|--------------------|--------------------|
| Past Loss (Date of Incident to 12/31/2021)                         | \$411,373          | \$411,373          |
| Net Future Loss of Wages and Pension (from 01/01/2022 to Worklife) | <u>\$1,534,195</u> | <u>\$1,931,672</u> |
| Total Past and Future Loss   | \$1,945,568        | \$2,343,045        |

Summary of Economic Damages in Present Value Terms

|   | <u>Age 60</u>      | <u>Age 62</u>      |
|---|--------------------|--------------------|
| Past Loss (Date of Incident to 12/31/2021)  | \$411,373          | \$411,373          |
| Net Present Value of Future Loss of Wages and Pension (from 01/01/2022 to Worklife) | <u>\$1,201,401</u> | <u>\$1,467,589</u> |
| Total Past and Present Value of Future Loss   | \$1,612,774        | \$1,878,962        |

Exhibits offering all the details of the analysis of Mr. Moran's alleged economic damages are presented at the end of this report.

#### IV. Updates to the Analysis of Alleged Economic Damages

The analysis delineated in the Tranfa-Abboud 2020 report predates two important events that are independent of one another and unrelated to the claims in this litigation, and which would have likely affected Mr. Moran's work hours and, hence, his total compensation:

- 1) The COVID-19 Pandemic: The government response to the COVID-19 pandemic resulted in statewide closures that affected the ridership of public transportation for the majority of year 2020, which continued in 2021, and which continue to evolve as of the date of this report.
- 2) Policy and Practices Changes by the MTA: Based on the MTA Annual Report on Overtime (FY 2020 Review) dated March 2021 ("the Overtime Report"), and starting in year 2019, the MTA Overtime Task Force ("MTA-OTTF") commenced a process geared towards addressing overtime issues "to make sure that overtime is used only when necessary or when it is the most efficient and cost-effective option." Accordingly, the MTA commenced the implementation of fifteen recommendations made by Morrison & Foerster via the report titled "*Report on Findings and Recommendations for the Metropolitan Transportation Authority, Overtime Policies and Procedures*" dated August 15, 2019 ("the Morrison & Foerster report"), and four additional recommendations made by the MTA Inspector General, all geared towards the improvement of overtime management practices. Following those recommendations, the MTA-OTTF "put in place the policies and procedures necessary to better control overtime and drive the message to all levels of the organization."

Both the COVID-19-related response and closures and the current MTA policy on overtime have likely had a significant impact on the amount of overtime earned by employees of the MTA as a whole, as well as the amount of overtime earned by employees of the Metro-North Railroad ("MNR").

It is also important to distinguish between a non-structural, temporary event and a structural, potentially more permanent event. While the changes related to the COVID-19 pandemic response

are most likely temporary in nature, with a likely return to pre-COVID patterns as the ridership returns to more normal levels, the changes implemented by the MTA related specifically to the control of overtime and its effects on the MTA budget may be more permanent in nature.

The following table, which was also presented in the Tranfa-Abboud 2020 report, reflects Mr. Moran's W-2 reported wages, and the premium above Base Wages earned by Mr. Moran:

| <u>Year</u>       | <u>W-2 Wages</u> | <u>"Additional Wages"</u><br><u>As % of Base Wages</u> |
|-------------------|------------------|--|
| 2012              | \$125,560        | 53.7%  |
| 2013              | \$133,028        | 58.0%  |
| 2014              | \$143,755        | 65.8%  |
| 2015              | \$206,585        | 131.2%   |
| 2016              | \$162,680        | 79.4%  |
| Average 2012-2016 |                  | 77.6%  |

Based on the above table, it was established that Mr. Moran's "Additional Wages" (also referred to herein as "Extra Wages") represented a premium of 77.6% over Base Wages in years 2012-2016.

The following additional information has been provided by the MTA through email correspondence:<sup>1</sup>

| <u>Year</u>       | <u>W-2 Wages</u> | <u>Estimated</u><br><u>Base Wages</u> | <u>Overtime</u><br><u>Pay</u> | <u>Overtime Pay</u><br><u>Premium</u><br><u>Over</u><br><u>Base Wages</u> |
|-------------------|------------------|---------------------------------------|-------------------------------|---|
| 2014              | \$143,755        | \$86,726                              | \$52,092                      | 60.1%   |
| 2015              | \$206,585        | \$89,348                              | \$57,508                      | 64.4%   |
| 2016              | \$162,680        | \$90,688                              | \$57,938                      | 63.9%   |
| Average 2014-2016 |                  |                                       |                               | 62.8%   |

<sup>1</sup> Email correspondence from Steve Weiss, Financial Liaison, MTA Metro-North Railroad, MTA Office of the Chief Financial Officer, dated July 30, 2021, containing overtime pay data for Thomas Moran for years 2014-2017, and Metro-North Railroad overtime statistics for the period 2018 through July 2021.

As can be noted from the above table, Mr. Moran's total annual wages as an employee of MTA-MN included a significant component of Overtime Pay. In fact, Mr. Moran's Overtime Pay was equivalent to an average premium of 62.8% over his Base Wages during the three-year period 2014-2016.

In addition to the above, the following information has been provided by the MTA through email correspondence:<sup>2</sup>

- a. "Mr. Moran's overtime pay puts him in the top 10% of conductor overtime recipients."
- b. Mr. Moran's reported W-2 wages for year 2015 (\$206,585), and which were significantly higher than his historical wages in 2012-2014, included retroactive pay that resulted from a new labor agreement. The wages that Mr. Moran earned in 2015 totaled approximately \$174,000.
- c. The "Average Overtime Earnings of Top 10%" of overtime-earning employees on the New Haven Line Train Service was reported to be \$51,211 in 2018, \$50,297 in 2019, and \$28,800 in 2020.

Based on this information, it is established that the average Overtime Pay of the top 10% of employees on the New Haven Line Train Service decreased by 2% in year 2019 relative to year 2018, and declined by approximately 43% in year 2020 relative to year 2019.

At this time, it is assumed that the decline in the average Overtime Pay of employees on the New Haven Line Train Service in 2020 was a result of the combined effects of the changes to the MTA-MN service supply and demand due to COVID-19, as well as the changes implemented by the

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<sup>2</sup> Email correspondence from Steve Weiss, Financial Liaison, MTA Metro-North Railroad, MTA Office of the Chief Financial Officer, dated July 30, 2021, containing overtime pay data for Thomas Moran for years 2014-2017, and Metro-North Railroad overtime statistics for the period 2018 through July 2021.

MTA to address and control overtime. It is further assumed that Mr. Moran's Overtime Pay may have decreased in a fashion aligned with the decrease in the "Average Overtime Earnings of the Top 10%" reflected in the email correspondence received from the MTA.

In addition to the above, the following information is extracted from the MTA 2020 Overtime Report:

- a) "MTA-wide, overtime spending dropped dramatically in both 2019 and 2020 when compared to the prior year – 9% in 2019 and another 10% in 2020."
- b) "Broadly speaking, the analysis shows that the full short-term/long-term cost of an average hour of straight time versus an hour of overtime for employees not in their FAS [Final Average Salary] years is equal. But an average hour of overtime for employees in their FAS years, which often is mandated by work rules, is much greater than an hour of straight time."
- c) "In short, the use of overtime is an important tool for the MTA. The key is to make sure that it is only used when essential and that it represents an efficient use of resources."
- d) "The 2020 operations overtime budget reflects an MTA-Board mandated 5% (\$4.8M) reduction that was incorporated in the 2020 Budget adopted in February."
- e) "Metro-North's 2020 Scheduled Service overtime reflects significant savings compared to the budget due to the impacts of reduced service due to COVID-19. Metro-North reduced train service at the end of March to 63% of pre-COVID service levels with a further reduction to 43% implemented from mid-April to mid-June. The 63% level of service was restored in mid-June and has stayed at the level into 2021."

- f) The prior year's savings (year 2019) is due to the "increased availability among Train & Engine staff, minimizing the need to pay overtime for staff to cover scheduled shifts during their relief days."
- g) For MTA-MN, "overtime earnings in 2020 are less than 19% of regular pay for overtime eligible employees." More than 74% of the overtime earned in 2020 was attributable to various areas, including train operations and COVID-19-related measures.
- h) For MTA-MN, the percentage of employees who earned "overtime at 50% or more of their regular pay decreased slightly from 16% to 13%."

The above information has been incorporated into the analysis of Mr. Moran's alleged economic damages to illustrate what may have been the potential effects of COVID-19-related closures and the current MTA overtime policies on Mr. Moran's compensation. To that end, the following assumptions have been made:

- A) Overtime Pay versus All Other Categories of "Extra Wages": It is assumed that the effects of COVID-19 and the current MTA overtime policies would have affected only Overtime Pay, and that all other categories of "Extra Wages" would have remained consistent.

As discussed above, Mr. Moran's "Extra Wages" (including Overtime Pay) were equivalent to a premium of 77.6% over Base Wages. Overtime Pay represented a 62.8% premium over Base Wages. Accordingly, all other categories of "Extra Wages" represented a 14.8% premium over Base Wages.

At this time, it is assumed that, had Mr. Moran continued to work for the MTA-MN, the amount that he may have earned as "Extra Wages" excluding Overtime Pay would have continued to be equivalent to a premium of 14.8% over Base Wages.

- B) Overtime Pay Premium Over Base Wages – Years 2020 and 2021: For years 2020 and 2021, it is assumed that Mr. Moran's Overtime Pay may have been equivalent to a premium of 19% over Base Wages.

This is based on information extracted from the Overtime Report, according to which the MTA-MN's "overtime earnings in 2020 are less than 19% of regular pay for overtime eligible employees."

- C) Overtime Pay Premium Over Base Wages – Years 2022 and 2023: For years 2022 and 2023, it is assumed that Mr. Moran's Overtime Pay may have increased, and it is assumed that his Overtime Pay may have represented a premium of 50% over his Base Wages.

This is based on the assumption that by the beginning of year 2022 it is possible that the level of service and ridership of MTA-MN would continue to increase towards a return to pre-COVID levels.

- D) Overtime Pay Premium Over Base Wages – Years 2024 to Retirement: For years 2024 and beyond, it is assumed that Mr. Moran's Overtime Pay may have continued to increase.

As previously discussed, Mr. Moran's historical Overtime Pay averaged a 62.8% premium over his Base Wages. However, and based on the board-mandated reduction of 5% in overtime expenditures, it is assumed that Mr. Moran's Overtime Pay may not have fully returned to its historical levels, and may have been controlled by the 5% mandated reduction.

Accordingly, it is assumed that as of 2024, the amount of Mr. Moran's Overtime Pay may have been equivalent to a 57.8% (62.8% - 5%) premium over his Base Wages.



This approach is based on the conservative (favorable to Mr. Moran) assumption that the current MTA overtime reduction-related policies may have had only a limited impact on Mr. Moran's Overtime Pay from year 2024 forward.

It is important to note that, as discussed in detail in the Tranfa-Abboud 2020 report, the retirement pension that Mr. Moran may have received upon reaching his retirement eligibility age would have been based on the years of service accrued as of the date of retirement and Mr. Moran's Final Average Salary ("FAS").

The assumption that Mr. Moran's Overtime Pay may have remained subject to the board-mandated 5% reduction discussed above has a direct impact on the estimation of Mr. Moran's alleged loss of retirement pension benefits. In fact, to the extent that the MTA board-mandated reduction of overtime by 5% may remain in place as permanent structural change, such policy may have impacted Mr. Moran's Overtime Pay during his FAS years, which, in turn, would have impacted his retirement pension benefits.

As discussed in Section I of this supplemental report, the effects of the COVID-19 pandemic as well as the implementation of overtime-related policies by the MTA continue to evolve, and therefore, it is necessarily the case that the data that is currently available does not capture all the effects of these events. As the circumstances of the COVID-19 pandemic allow for a return to a higher level of normalcy, the supply and demand of public transportation will likely change, and the effects on the overtime pay of MTA employees will also likely change. In similar fashion, as the overtime-related policies by the MTA continue to be implemented, the effects of these policies on the hours worked by employees of the MTA will likely continue to change.

Accordingly, it may take some time before the data necessary for a more detailed analysis becomes available. Therefore, the analysis presented hereby is based on the best data available to date.

Contingent on the future availability of further data, my analysis and this report may be further supplemented, if requested.

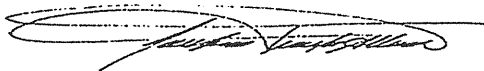


The details of the recalculation of Mr. Moran's alleged economic damages are presented in the exhibits that follow. The exhibits that follow can be readily compared to the exhibits included with the Tranfa-Abboud 2020 report, with the shaded areas reflecting analysis updates. This approach is intended to facilitate the reader's side-by-side review of this supplemental report and the Tranfa-Abboud 2020 report.

It is also important to note that the Past and Future periods of damages have been adjusted to reflect an assumed trial date of January 2022. Accordingly, the period of Past damages extends from the date of the incident to December 31, 2021, and the period of Future damages extends from January 1, 2022 to the end of the two scenarios of Mr. Moran's remaining worklife, i.e., age 60 (Scenario I) and age 62 (Scenario II).

The discussion and analysis delineated throughout the various sections of this report is based on the records and information available to date. Should any additional information become available before or at trial that would significantly affect the results of my analysis, I reserve the right to update my analysis and to supplement this report accordingly, if requested.

Respectfully submitted,



Josefina V. Tranfa-Abboud, Ph.D., CFE, MAFF

**SCENARIO I: Past and Future Lost Compensation: Thomas Moran Works Until Age 60**  
**UPDATED 2021-8-18**

| Compensation in the Absence of Injury |       |                     |  |  |  |                             |                           |                                 |                                  |                                   |                 |                     |
|---------------------------------------|-------|---------------------|--|--|--|-----------------------------|---------------------------|---------------------------------|----------------------------------|-----------------------------------|-----------------|---------------------|
|                                       |       | "Extra Wages"       |  |  |  |                             |                           |                                 |                                  |                                   |                 |                     |
| Year                                  | Age   | Base Wages<br>2.50% | Estimated<br>Overtime<br>Component of<br>Extra Wages<br>Equivalent to<br>a Premium of<br>62.8%<br>Over<br>Base Wages | Estimated<br>Other<br>Extra Wages<br>Equivalent to<br>a Premium of<br>14.84%<br>Over<br>Base Wages | Extra<br>Wages<br>Equivalent to<br>a Premium of<br>77.6%<br>Over<br>Base Wages | Estimated<br>Total<br>Wages | Metro<br>North<br>Pension | Tier I<br>Contribution<br>6.20% | Tier II<br>Contribution<br>4.90% | Medicare<br>Contribution<br>1.45% | Income<br>Taxes | Net<br>Compensation |
|                                       |       |                     | Base Wages   | Base Wages   | Base Wages   |                             |                           |                                 |                                  |                                   |                 |                     |
| 2017.59                               | 48.34 | \$37,946            | \$23,820   | \$5,630  | \$29,449   | \$67,395                    |                           |                                 |                                  |                                   |                 | \$52,403            |
| 2018                                  | 48.75 | \$94,980            | \$59,621   | \$14,091   | \$73,712   | \$168,692                   |                           | (\$7,961)                       | (\$4,675)                        | (\$977)                           | (\$14,015)      | \$117,674           |
| 2019                                  | 49.75 | \$95,279            | \$59,809   | \$14,136   | \$73,944   | \$169,224                   |                           | (\$8,240)                       | (\$4,836)                        | (\$2,446)                         | (\$35,936)      | \$117,853           |
|                                       |       |                     |  |  |  |                             |                           |                                 |                                  |                                   |                 |                     |
|                                       |       |                     | Decline to be<br>Equivalent to<br>a Premium of<br>19.0%<br>Over<br>Base Wages  | Remain<br>Equivalent to<br>a Premium of<br>14.84%<br>Over<br>Base Wages                            | Decline to be<br>Equivalent to<br>a Premium of<br>33.8%<br>Over<br>Base Wages  |                             |                           |                                 |                                  |                                   |                 |                     |
| 2020                                  | 50.75 | \$97,661            | \$18,556   | \$14,489   | \$33,045   | \$130,706                   |                           | (\$8,537)                       | (\$5,013)                        | (\$1,895)                         | (\$27,795)      | \$87,466            |
| 2021                                  | 51.75 | \$100,103           | \$19,019   | \$14,851   | \$33,871   | \$133,974                   |                           | (\$8,800)                       | (\$5,158)                        | (\$1,943)                         | (\$28,628)      | \$89,444            |
|                                       |       |                     |  |  |  |                             |                           |                                 |                                  |                                   |                 |                     |
|                                       |       |                     | Increase to be<br>Equivalent to<br>a Premium of<br>50.0%<br>Over<br>Base Wages                                       | Remain<br>Equivalent to<br>a Premium of<br>14.84%<br>Over<br>Base Wages                            | Increase to be<br>Equivalent to<br>a Premium of<br>64.8%<br>Over<br>Base Wages |                             |                           |                                 |                                  |                                   |                 |                     |
| 2022                                  | 52.75 | \$102,605           | \$51,303   | \$15,223   | \$66,525   | \$169,130                   |                           | (\$9,071)                       | (\$5,308)                        | (\$2,452)                         | (\$36,313)      | \$115,986           |
| 2023                                  | 53.75 | \$105,170           | \$52,585   | \$15,603   | \$68,188   | \$173,359                   |                           | (\$9,351)                       | (\$5,462)                        | (\$2,514)                         | (\$37,396)      | \$118,636           |
|                                       |       |                     |  |  |  |                             |                           |                                 |                                  |                                   |                 |                     |
|                                       |       |                     | Return to be<br>Equivalent to<br>a Premium of<br>57.8%<br>Over<br>Base Wages   | Remain<br>Equivalent to<br>a Premium of<br>14.84%<br>Over<br>Base Wages                            | Return to be<br>Equivalent to<br>a Premium of<br>72.6%<br>Over<br>Base Wages   |                             |                           |                                 |                                  |                                   |                 |                     |
| 2024                                  | 54.75 | \$107,800           | \$62,278   | \$15,993   | \$78,271   | \$186,071                   |                           | (\$9,639)                       | (\$5,620)                        | (\$2,698)                         | (\$40,323)      | \$127,791           |
| 2025                                  | 55.75 | \$110,495           | \$63,835   | \$16,393   | \$80,228   | \$190,723                   |                           | (\$9,936)                       | (\$5,783)                        | (\$2,765)                         | (\$41,519)      | \$130,719           |
| 2026                                  | 56.75 | \$113,257           | \$65,431   | \$16,803   | \$82,234   | \$195,491                   |                           | (\$10,242)                      | (\$5,951)                        | (\$2,835)                         | (\$42,748)      | \$133,716           |
| 2027                                  | 57.75 | \$116,088           | \$67,067   | \$17,223   | \$84,290   | \$200,378                   |                           | (\$10,557)                      | (\$6,123)                        | (\$2,905)                         | (\$44,008)      | \$136,784           |
| 2028                                  | 58.75 | \$118,991           | \$68,743   | \$17,654   | \$86,397   | \$205,387                   |                           | (\$10,883)                      | (\$6,301)                        | (\$2,978)                         | (\$45,302)      | \$139,924           |
| 2029                                  | 59.75 | \$30,491            | \$17,615   | \$4,524  | \$22,139   | \$52,631                    | \$68,505                  | (\$3,263)                       | (\$2,579)                        | (\$763)                           | (\$21,184)      | \$93,347            |
| 2030                                  | 60.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$16,018)      | \$86,740            |
| 2031                                  | 61.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$15,854)      | \$86,904            |
| 2032                                  | 62.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$15,687)      | \$87,071            |
| 2033                                  | 63.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$15,518)      | \$87,240            |
| 2034                                  | 64.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$15,346)      | \$87,412            |
| 2035                                  | 65.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$15,172)      | \$87,586            |
| 2036                                  | 66.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,996)      | \$87,762            |
| 2037                                  | 67.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,817)      | \$87,941            |
| 2038                                  | 68.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,636)      | \$88,122            |
| 2039                                  | 69.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,452)      | \$88,306            |
| 2040                                  | 70.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,265)      | \$88,493            |
| 2041                                  | 71.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,208)      | \$88,550            |
| 2042                                  | 72.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,162)      | \$88,596            |
| 2043                                  | 73.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,115)      | \$88,643            |
| 2044                                  | 74.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,067)      | \$88,691            |
| 2045                                  | 75.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$14,018)      | \$88,740            |
| 2046                                  | 76.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$13,969)      | \$88,789            |
| 2047                                  | 77.75 |                     |  |  |  |                             | \$102,758                 |                                 |                                  |                                   | (\$13,919)      | \$88,840            |
| 2048                                  | 78.75 |                     |  |  |  |                             | \$84,262                  |                                 |                                  |                                   | (\$11,414)      | \$72,848            |

**SCENARIO I - Continued: Past and Future Lost Compensation: Thomas Moran Works Until Age 60**  
**UPDATED 2021-8-18**

| Post-Injury Compensation |       |                           |                |                                 |                                    |               |                     |
|--------------------------|-------|---------------------------|----------------|---------------------------------|------------------------------------|---------------|---------------------|
| Year                     | Age   | Metro<br>North<br>Pension | Wages<br>2.50% | Retirement<br>Benefits<br>5.80% | Social<br>Security and<br>Medicare | Income<br>Tax | Net<br>Compensation |
|                          |       |                           |                |                                 |                                    |               | Net<br>Loss         |
| 2017.59                  | 48.34 |                           |                |                                 |                                    |               | \$52,403            |
| 2018                     | 48.75 |                           |                |                                 |                                    |               | \$117,674           |
| 2019                     | 49.75 |                           |                |                                 |                                    |               | \$117,853           |
| 2020                     | 50.75 |                           | \$18,482       | \$1,072                         | (\$1,414)                          | \$0           | \$18,140            |
| 2021                     | 51.75 |                           | \$37,579       | \$2,180                         | (\$2,875)                          | (\$1,556)     | \$35,328            |
| 2022                     | 52.75 |                           | \$38,518       | \$2,234                         | (\$2,947)                          | (\$1,646)     | \$36,160            |
| 2023                     | 53.75 |                           | \$39,481       | \$2,290                         | (\$3,020)                          | (\$1,739)     | \$37,012            |
| 2024                     | 54.75 |                           | \$40,468       | \$2,347                         | (\$3,096)                          | (\$1,896)     | \$37,824            |
| 2025                     | 55.75 |                           | \$41,480       | \$2,406                         | (\$3,173)                          | (\$2,067)     | \$38,646            |
| 2026                     | 56.75 |                           | \$42,517       | \$2,466                         | (\$3,253)                          | (\$2,178)     | \$39,552            |
| 2027                     | 57.75 |                           | \$43,580       | \$2,528                         | (\$3,334)                          | (\$2,294)     | \$40,480            |
| 2028                     | 58.75 |                           | \$44,669       | \$2,591                         | (\$3,417)                          | (\$2,411)     | \$41,432            |
| 2029                     | 59.75 |                           | \$11,541       | \$669                           | (\$883)                            | \$0           | \$11,327            |
| 2030                     | 60.75 |                           |                |                                 |                                    | \$0           | \$0                 |
| 2031                     | 61.75 | \$21,527                  |                |                                 |                                    | \$0           | \$21,527            |
| 2032                     | 62.75 | \$51,664                  |                |                                 |                                    | (\$3,469)     | \$48,195            |
| 2033                     | 63.75 | \$51,664                  |                |                                 |                                    | (\$3,428)     | \$48,236            |
| 2034                     | 64.75 | \$51,664                  |                |                                 |                                    | (\$3,387)     | \$48,277            |
| 2035                     | 65.75 | \$51,664                  |                |                                 |                                    | (\$3,345)     | \$48,319            |
| 2036                     | 66.75 | \$51,664                  |                |                                 |                                    | (\$3,303)     | \$48,361            |
| 2037                     | 67.75 | \$51,664                  |                |                                 |                                    | (\$3,259)     | \$48,405            |
| 2038                     | 68.75 | \$51,664                  |                |                                 |                                    | (\$3,216)     | \$48,448            |
| 2039                     | 69.75 | \$51,664                  |                |                                 |                                    | (\$3,171)     | \$48,493            |
| 2040                     | 70.75 | \$51,664                  |                |                                 |                                    | (\$3,126)     | \$48,538            |
| 2041                     | 71.75 | \$51,664                  |                |                                 |                                    | (\$3,081)     | \$48,583            |
| 2042                     | 72.75 | \$51,664                  |                |                                 |                                    | (\$3,035)     | \$48,629            |
| 2043                     | 73.75 | \$51,664                  |                |                                 |                                    | (\$2,988)     | \$48,676            |
| 2044                     | 74.75 | \$51,664                  |                |                                 |                                    | (\$2,940)     | \$48,724            |
| 2045                     | 75.75 | \$51,664                  |                |                                 |                                    | (\$2,892)     | \$48,772            |
| 2046                     | 76.75 | \$51,664                  |                |                                 |                                    | (\$2,843)     | \$48,821            |
| 2047                     | 77.75 | \$51,664                  |                |                                 |                                    | (\$2,793)     | \$48,871            |
| 2048                     | 78.75 | \$41,942                  |                |                                 |                                    | (\$2,268)     | \$39,674            |
| Total Past and Future    |       |                           |                |                                 |                                    |               | \$1,945,568         |
| Present Value            |       |                           |                |                                 |                                    |               | \$1,612,774         |

**SCENARIO II: Past and Future Lost Compensation: Thomas Moran Works Until Age 62**  
**UPDATED 2021-8-18**

| Compensation in the Absence of Injury                           |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
|---|-------|---------------------|--|--|---|-----------------------------|---------------------------|---------------------------------|----------------------------------|-----------------------------------|-----------------|---------------------|
| Year  | Age   | Base Wages<br>2.50% | "Extra Wages"  |  |   | Estimated<br>Total<br>Wages | Metro<br>North<br>Pension | Tier I<br>Contribution<br>6.20% | Tier II<br>Contribution<br>4.90% | Medicare<br>Contribution<br>1.45% | Income<br>Taxes | Net<br>Compensation |
|   |       |                     | Estimated<br>Overtime<br>Component of<br>Extra Wages<br>Equivalent to<br>a Premium of<br>62.8% | Estimated<br>Other<br>Extra Wages<br>Equivalent to<br>a Premium of<br>14.84% | TOTAL<br>Extra<br>Wages<br>Equivalent to<br>a Premium of<br>77.6% |                             |                           |                                 |                                  |                                   |                 |                     |
|   |       |                     | Over<br>Base Wages   | Over<br>Base Wages   | Over<br>Base Wages  |                             |                           |                                 |                                  |                                   |                 |                     |
|   |       |                     | Base Wages   | Base Wages   | Base Wages  |                             |                           |                                 |                                  |                                   |                 |                     |
| 2017.59   | 48.34 | \$37,946            | \$23,820   | \$5,630  | \$29,449  | \$67,395                    |                           |                                 |                                  | (\$977)                           | (\$14,015)      | \$52,403            |
| 2018  | 48.75 | \$94,980            | \$59,621   | \$14,091   | \$73,712  | \$168,692                   |                           | (\$7,961)                       | (\$4,675)                        | (\$2,446)                         | (\$35,936)      | \$117,674           |
| 2019  | 49.75 | \$95,279            | \$59,809   | \$14,136   | \$73,944  | \$169,224                   |                           | (\$8,240)                       | (\$4,836)                        | (\$2,454)                         | (\$35,841)      | \$117,853           |
| Decline to be Equivalent to a Premium of 19.0% Over Base Wages  |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| Remain Equivalent to a Premium of 14.84% Over Base Wages        |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| Decline to be Equivalent to a Premium of 33.8% Over Base Wages  |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| 2020  | 50.75 | \$97,661            | \$18,556   | \$14,489   | \$33,045  | \$130,706                   |                           | (\$8,537)                       | (\$5,013)                        | (\$1,895)                         | (\$27,795)      | \$87,466            |
| 2021  | 51.75 | \$100,103           | \$19,019   | \$14,851   | \$33,871  | \$133,974                   |                           | (\$8,800)                       | (\$5,158)                        | (\$1,943)                         | (\$28,628)      | \$89,444            |
| Increase to be Equivalent to a Premium of 50.0% Over Base Wages |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| Remain Equivalent to a Premium of 14.84% Over Base Wages        |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| Increase to be Equivalent to a Premium of 64.8% Over Base Wages |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| 2022  | 52.75 | \$102,605           | \$51,303   | \$15,223   | \$66,525  | \$169,130                   |                           | (\$9,071)                       | (\$5,308)                        | (\$2,452)                         | (\$36,313)      | \$115,986           |
| 2023  | 53.75 | \$105,170           | \$52,585   | \$15,603   | \$68,188  | \$173,359                   |                           | (\$9,351)                       | (\$5,462)                        | (\$2,514)                         | (\$37,396)      | \$118,636           |
| Return to be Equivalent to a Premium of 57.8% Over Base Wages   |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| Remain Equivalent to a Premium of 14.84% Over Base Wages        |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| Return to be Equivalent to a Premium of 72.6% Over Base Wages   |       |                     |  |  |   |                             |                           |                                 |                                  |                                   |                 |                     |
| 2024  | 54.75 | \$107,800           | \$62,278   | \$15,993   | \$78,271  | \$186,071                   |                           | (\$9,639)                       | (\$5,620)                        | (\$2,698)                         | (\$40,323)      | \$127,791           |
| 2025  | 55.75 | \$110,495           | \$63,835   | \$16,393   | \$80,228  | \$190,723                   |                           | (\$9,936)                       | (\$5,783)                        | (\$2,765)                         | (\$41,519)      | \$130,719           |
| 2026  | 56.75 | \$113,257           | \$65,431   | \$16,803   | \$82,234  | \$195,491                   |                           | (\$10,242)                      | (\$5,951)                        | (\$2,835)                         | (\$42,748)      | \$133,716           |
| 2027  | 57.75 | \$116,088           | \$67,067   | \$17,223   | \$84,290  | \$200,378                   |                           | (\$10,557)                      | (\$6,123)                        | (\$2,905)                         | (\$44,008)      | \$136,784           |
| 2028  | 58.75 | \$118,991           | \$68,743   | \$17,654   | \$86,397  | \$205,387                   |                           | (\$10,883)                      | (\$6,301)                        | (\$2,978)                         | (\$45,302)      | \$139,924           |
| 2029  | 59.75 | \$121,965           | \$70,462   | \$18,095   | \$88,557  | \$210,522                   |                           | (\$11,218)                      | (\$6,484)                        | (\$3,053)                         | (\$46,632)      | \$143,137           |
| 2030  | 60.75 | \$125,014           | \$72,223   | \$18,547   | \$90,771  | \$215,785                   |                           | (\$11,563)                      | (\$6,672)                        | (\$3,129)                         | (\$47,996)      | \$146,425           |
| 2031  | 61.75 | \$33,316            | \$19,248   | \$4,943  | \$24,190  | \$57,507                    | \$87,052                  | (\$5,065)                       | (\$4,003)                        | (\$834)                           | (\$26,813)      | \$107,844           |
| 2032  | 62.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$22,906)      | \$107,672           |
| 2033  | 63.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$22,730)      | \$107,848           |
| 2034  | 64.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$22,552)      | \$108,026           |
| 2035  | 65.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$22,371)      | \$108,207           |
| 2036  | 66.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$22,188)      | \$108,390           |
| 2037  | 67.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$22,002)      | \$108,576           |
| 2038  | 68.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$21,813)      | \$108,765           |
| 2039  | 69.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$21,622)      | \$108,955           |
| 2040  | 70.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$21,428)      | \$109,149           |
| 2041  | 71.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$21,232)      | \$109,346           |
| 2042  | 72.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$21,032)      | \$109,546           |
| 2043  | 73.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$20,830)      | \$109,747           |
| 2044  | 74.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$20,626)      | \$109,952           |
| 2045  | 75.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$20,418)      | \$110,160           |
| 2046  | 76.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$20,208)      | \$110,370           |
| 2047  | 77.75 |                     |  |  |   | \$130,578                   |                           |                                 |                                  |                                   | (\$19,994)      | \$110,584           |
| 2048  | 78.75 |                     |  |  |   | \$107,074                   |                           |                                 |                                  |                                   | (\$16,395)      | \$90,679            |

**SCENARIO II - Continued: Past and Future Lost Compensation: Thomas Moran Works Until Age 62**  
**UPDATED 2021-8-18**

| Post-Injury Compensation |       |                           |                |                                 |                                    |                 |                     |             |
|--------------------------|-------|---------------------------|----------------|---------------------------------|------------------------------------|-----------------|---------------------|-------------|
| Year                     | Age   | Metro<br>North<br>Pension | Wages<br>2.50% | Retirement<br>Benefits<br>5.80% | Social<br>Security and<br>Medicare | Income<br>Taxes | Net<br>Compensation | Net<br>Loss |
| 2017.59                  | 48.34 |                           |                |                                 |                                    |                 |                     | \$52,403    |
| 2018                     | 48.75 |                           |                |                                 |                                    |                 |                     | \$117,674   |
| 2019                     | 49.75 |                           |                |                                 |                                    |                 |                     | \$117,853   |
|                          |       |                           |                |                                 |                                    |                 |                     |             |
| 2020                     | 50.75 |                           | \$18,482       | \$1,072                         | (\$1,414)                          | \$0             | \$18,140            | \$69,326    |
| 2021                     | 51.75 |                           | \$37,579       | \$2,180                         | (\$2,875)                          | (\$1,556)       | \$35,328            | \$54,117    |
|                          |       |                           |                |                                 |                                    |                 |                     |             |
| 2022                     | 52.75 |                           | \$38,518       | \$2,234                         | (\$2,947)                          | (\$1,646)       | \$36,160            | \$79,826    |
| 2023                     | 53.75 |                           | \$39,481       | \$2,290                         | (\$3,020)                          | (\$1,739)       | \$37,012            | \$81,625    |
|                          |       |                           |                |                                 |                                    |                 |                     |             |
| 2024                     | 54.75 |                           | \$40,468       | \$2,347                         | (\$3,096)                          | (\$1,896)       | \$37,824            | \$89,967    |
| 2025                     | 55.75 |                           | \$41,480       | \$2,406                         | (\$3,173)                          | (\$2,067)       | \$38,646            | \$92,073    |
| 2026                     | 56.75 |                           | \$42,517       | \$2,466                         | (\$3,253)                          | (\$2,178)       | \$39,552            | \$94,163    |
| 2027                     | 57.75 |                           | \$43,580       | \$2,528                         | (\$3,334)                          | (\$2,294)       | \$40,480            | \$96,304    |
| 2028                     | 58.75 |                           | \$44,669       | \$2,591                         | (\$3,417)                          | (\$2,411)       | \$41,432            | \$98,492    |
| 2029                     | 59.75 |                           | \$45,786       | \$2,656                         | (\$3,503)                          | (\$2,532)       | \$42,407            | \$100,730   |
| 2030                     | 60.75 |                           | \$46,931       | \$2,722                         | (\$3,590)                          | (\$2,658)       | \$43,405            | \$103,021   |
| 2031                     | 61.75 | \$21,527                  | \$12,125       | \$703                           | (\$928)                            | (\$1,106)       | \$32,321            | \$75,523    |
| 2032                     | 62.75 | \$51,664                  |                |                                 |                                    | (\$3,469)       | \$48,195            | \$59,477    |
| 2033                     | 63.75 | \$51,664                  |                |                                 |                                    | (\$3,428)       | \$48,236            | \$59,611    |
| 2034                     | 64.75 | \$51,664                  |                |                                 |                                    | (\$3,387)       | \$48,277            | \$59,748    |
| 2035                     | 65.75 | \$51,664                  |                |                                 |                                    | (\$3,345)       | \$48,319            | \$59,888    |
| 2036                     | 66.75 | \$51,664                  |                |                                 |                                    | (\$3,303)       | \$48,361            | \$60,029    |
| 2037                     | 67.75 | \$51,664                  |                |                                 |                                    | (\$3,259)       | \$48,405            | \$60,171    |
| 2038                     | 68.75 | \$51,664                  |                |                                 |                                    | (\$3,216)       | \$48,448            | \$60,317    |
| 2039                     | 69.75 | \$51,664                  |                |                                 |                                    | (\$3,171)       | \$48,493            | \$60,462    |
| 2040                     | 70.75 | \$51,664                  |                |                                 |                                    | (\$3,126)       | \$48,538            | \$60,611    |
| 2041                     | 71.75 | \$51,664                  |                |                                 |                                    | (\$3,081)       | \$48,583            | \$60,763    |
| 2042                     | 72.75 | \$51,664                  |                |                                 |                                    | (\$3,035)       | \$48,629            | \$60,917    |
| 2043                     | 73.75 | \$51,664                  |                |                                 |                                    | (\$2,988)       | \$48,676            | \$61,072    |
| 2044                     | 74.75 | \$51,664                  |                |                                 |                                    | (\$2,940)       | \$48,724            | \$61,227    |
| 2045                     | 75.75 | \$51,664                  |                |                                 |                                    | (\$2,892)       | \$48,772            | \$61,388    |
| 2046                     | 76.75 | \$51,664                  |                |                                 |                                    | (\$2,843)       | \$48,821            | \$61,549    |
| 2047                     | 77.75 | \$51,664                  |                |                                 |                                    | (\$2,793)       | \$48,871            | \$61,713    |
| 2048                     | 78.75 | \$41,942                  |                |                                 |                                    | (\$2,268)       | \$39,674            | \$51,005    |
|                          |       |                           |                |                                 |                                    |                 |                     | \$2,343,045 |
| Present Value            |       |                           |                |                                 |                                    |                 |                     | \$1,878,962 |



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STATEMENT OF COMPENSATION

*Re: Thomas M. Moran v. MTA Metro-North Railroad Company, et al.*

Analytical Economics Associates LLC (AEA) will be compensated for the professional services provided in connection with the above-referenced matter as follows:

- The portion of my time dedicated to all professional services provided in connection with my analysis in this matter, including, but not limited to, review of documents, analysis, research, discussions (internal and with counsel, report preparation, and testimony will be invoiced at the rate of \$450 per hour.
- The billable rate of professional staff working under my supervision is in the range of \$100 to \$265 per hour.
- The fees for services rendered through the date of release of the Supplemental Economist Expert Report of Josefina V. Tranfa-Abboud, Ph.D., CFE, MAFF dated August 18, 2021 have not yet been totaled, and will be invoiced a few days after the release of the report.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Josefina V. Tranfa-Abboud', with a large, sweeping flourish extending to the right.

Josefina V. Tranfa-Abboud, Ph.D., CFE, MAFF  
[jtabboud@analyticaleconomics.com](mailto:jtabboud@analyticaleconomics.com)  
Main: 973-975-4710 ext. 100  
Direct: 973-590-2722





*Exhibit "A"*

*Curriculum Vitae*

*Josefina V. Tranfa-Abboud, Ph.D., CFE, MAFF*

*(Updated as of July 2021)*

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**Education and Credentials**

- Ph.D., Florida State University, Tallahassee, Economics, 1998  
Fields: Labor Economics; Industrial Organization and Regulation
- MAFF, National Association of Certified Valuers and Analysts, 2014
- CFE, Association of Certified Fraud Examiners, 2014
- Graduate Studies, Economics Institute, Boulder, CO, 1992
- B.S., Universidad Central de Venezuela, Caracas, Venezuela, 1990

**Professional Experience**

**Analytical Economics Associates LLC, NJ**

President and Chief Economist – May 2016 to Present

Responsible for deliverables to clients and all aspects of economic and statistical analysis, research, economic damages calculations, preparation of economic expert reports, and expert testimony in State and Federal matters involving claims in:

- a) Labor and employment;
- b) Personal injury (including Life Care Plan projections);
- c) Wrongful death;
- d) Product liability;
- e) New York State CPLR §4545 Articles 50-A and 50-B application;
- f) Commercial damages modeling and analysis (such as breach of contract, business interruption, intellectual property disputes);
- g) Legal malpractice;
- h) Statistical and economic damages analysis in connection to anti-discrimination legislation;
- i) Executive compensation studies.

**Marks Paneth LLP; New York, NY**

Principal – Financial Advisory Services – January 2013 to April 2016

Director – Financial Advisory Services – January 2010 to December 2012

Manager – Financial Advisory Services – July 2007 to December 2009

Responsible for deliverables to clients and all aspects of economic and statistical analysis, research, economic damages calculations, preparation of economic expert reports, and expert testimony in State and Federal matters involving claims in:

- a) Labor and employment;
- b) Personal injury (including Life Care Plan projections) and wrongful death;
- c) Product liability;
- d) New York State CPLR §4545 Articles 50-A and 50-B application;
- e) Commercial damages modeling and analysis;
- f) Legal malpractice;
- g) Statistical and economic damages analysis in connection to anti-discrimination legislation;
- h) Executive compensation studies.

**JTA Economic Consulting, LLC; Morristown, NJ**

**Projects:**

- Research and analysis on the effects on competition in health care provision markets – 2007
- Economic Consulting Services for MPS/Zaumeyer Economic Consulting LLC  
An Affiliate of Marks Paneth & Shron LLP; New York, NY  
Independent Economic Consultant – March 2007 to June 2007
  - Economic analysis and research in matters related to (a) commercial litigation; (b) insurance claims including personal injury and wrongful death; (c) employment litigation matters such as wrongful termination, failure to promote and compensation differential claims; (d) structured settlement analysis and computations under CPLR 50-A and 50-B regulations.

**Economatrix Research Associates, Inc.; New York, NY**

**Senior Economist - January 2005 to May 2006**

- Economic analysis, research and economic damages calculation in (a) pharmaceuticals commercial litigation; (b) business interruption litigation; (c) employment wrongful termination and failure to promote litigation; (d) personal injury litigation.
- Research and study specific industries as related to specific projects, including understanding the financial trends of the market and the specific companies.
- Research reliable sources of data and information, such as data and statistics and studies produced by Bureau of Economic Analysis, Department of Labor, Glass Lewis Associates, IMS Health, the American Hospital Association, Generic Pharmaceutical Association, among others.
- Review and understanding of scholarly articles related to case-specific issues.
- Review, analyze and critique opposing expert reports.
- Understanding the process by which specific companies prepare revenues forecasts.
- Prepare simulation analysis of revenue forecasts using Excel based upon case-specific assumptions.
- Prepare reports and other manuscripts as deliverables to clients as well as for internal use.
- Discuss research, methodology and findings with attorneys and clients in the process of delivering intermediate phase and final phase product.
- Analysis of income and benefits streams, including pension benefits analysis and calculations.

**ERS Group, Inc., Washington D.C. and Tallahassee, Florida**

**Research Economist – September 1998 to May 2003**

- Conducted economic and statistical analysis and research related to human resources policies and practices, prepared analyses, reports and expert opinion in employment litigation matters related to human resources decisions such as compensation, hiring, terminations, promotions, demotions, training, and job channeling.
- Analyzed large computerized databases to evaluate integrity of information and to conduct statistical analyses.
- Wrote and reviewed computer programs in SAS, SPSS and STATA to conduct statistical analyses.
- Trained project participants in the use of SAS, SPSS and STATA.
- Responsible for projects involving economic and statistical analyses related to employment litigation, as well as analysis involving both auditing and monitoring of HR policies and practices, including OFCCP and Affirmative Action compliance analyses.
- Designed analysis and established model specifications in accordance to organizational structure and Human Resources policies and decisions.
- Managed projects involving the estimation of economic losses associated with employment litigation, as well as litigation involving exposure to hazardous materials.
- Interpreted analysis results and prepare draft reports.



- Conducted literature reviews relevant for project specific issues and prepare informative documentation on relevant issues in the current economics literature.
- Discussed with clients data characteristics, human resources and compensation policies and practices, preparation of databases for analysis and corresponding results.

#### Teaching Experience in the United States and Abroad

Rutgers University Department of Public Administration, Ph.D. Program – Newark, New Jersey

Visiting Professor – Fall 2003 to Spring 2004

Course: Quantitative Methods I and II – (Ph.D. level research methods and econometrics course)

Florida State University - Department of Economics - Tallahassee, Florida

Teaching Assistant – Spring 1997 to Spring 1998

Courses: Introduction to Economic Thinking  
Principles of Microeconomics  
Economics of Industrial Organization

Universidad Central de Venezuela, Department of Economics – Caracas, Venezuela

Instructor – January 1990 to August 1992

Courses: Principles of Computer Science

#### Professional Experience in Venezuela

**Central Budget Office (OCEPRE) – Caracas, Venezuela**

Advisor to the Chief Officer (Asesor del Jefe de Oficina) – April 1992 to September 1992

- Modernization of the Public Administration:  
Liaison between the office and the consulting group conducting statistical analyses to evaluate viability of the new Budget System. Processed, reviewed and provided data as well as other relevant information to the consulting group.
- Technical Secretary on behalf of OCEPRE to the “President’s Committee for the Revision of Public Expenditure” (“Comision Presidencial Revisora del Gasto Publico”). Responsible for meetings logistics and the processing and provision of the information required by the Committee members.

**Central Planning and Coordination Office for the State - Caracas, Venezuela**

Oficina Central de Planificación y Coordinación del Estado (CORDIPLAN)

Advisor to the Director of Short-Term Planning – January 1991 to April 1992

(Asesor al Director de Corto Plazo)

- Assistant to the coordination of the Operating Plan for 1993 (Plan Operativo 1993) and Follow up Coordinator of the Operating Plan 1992 (Seguimiento del Plan Operativo 1992).
- Responsible for the Budget Follow up (PEC - Programa Economico Cuantificado) of 4 publicly owned, primary industry firms: SIDOR, VENALUM, Ferrominera del Orinoco and BAUXIVEN.
- Participated in the Committee for the Restructuring Plan of the Steel Plant (SIDOR). Project partially funded by the World Bank. In charge of the analysis and revision of the Auditing Systems of the plant.

### Publications

"Lost Profits Damages: Court Standards, New v. Unestablished Businesses, and the Economist's Analysis" in *The Forecast*, National Association of Forensic Economics (NAFE), Volume 32, Issue 2, May 2018.

"Damages in Employment Disputes" in Stanley P. Stevenson and David A. McPherson *Determining Economic Damages*, Chapter 15, James Publishing, Revision 26, February 2018.

"Lost Profits: The Reasonable Certainty Standards and the Modern New Business Rule," *QuickRead*, NACVA, September 10, 2015.

"Lost Profits, Business Cycles, and the Reasonable Certainty Standard," *QuickRead*, NACVA, March 19, 2015.

"Presenting Compensation Estimates To A Jury," *The Metropolitan Corporate Counsel*, July/August, 2014.

"Before the Measurement of Lost Profits: Investigating the Business and the Market to "Isolate" the Source of a Decline," *The Metropolitan Corporate Counsel*, June 2013.

"An Introduction to the Operations of CPLR §4545 Article 50-A and Article 50-B: Statutory Computations from the Perspective of the Economic Expert," *The Basics of Trial Practice: After the Verdict*, New York State Bar Association, April 2013.

"At The Crossroads of Health Care Reform, Corporate Restructuring and Employment Litigation". *The Metropolitan Corporate Counsel*, Volume 20, No. 12, December 2012.

"Employee Benefits: Not All Are Created Equal". *The Metropolitan Corporate Counsel*, Volume 20, No. 7, July/August 2012.

"Compensatory Damages in Lost Wages Claims: The Relevance of Unemployment Trends Adjustments". *Employee Relations Law Journal*, Vol. 37, No. 4, Spring 2012.

"Damages in Labor and Employment Disputes: Designing the Economic Damages Model and the Role of the Expert". *The Metropolitan Corporate Counsel*, Volume 19, No. 11, November 2011.

"Models for Estimating Lost Wages May Be Incomplete". Interview with CCH, a Wolters Kluwer Company. *CCH Human Resources Management Ideas and Trends*, Issue No. 727, October 5, 2011.

"An Alternative Approach to a Critical Issue in Employment: Identifying and Correcting Potential Disparities in Employee Selections Before They Happen". *Employee Relations Law Journal*, Vol. 36, No. 3, Winter 2010.

"The Use of Attrition Rates for Economic Loss Calculations In Employment Discrimination Cases – A Case Study", with Paul F. White and Frederick M. Holt. *Journal of Forensic Economics*, Volume XVI, Number 2, Published September 2004.

"Reply to 'Comments on 'The Use of Attrition Rates for Economic Loss Calculations In Employment Discrimination Cases – A Case Study'", with Paul F. White and Frederick M. Holt. *Journal of Forensic Economics*, Volume XVIII, Number 1. Published Winter 2005.

### Other Publications

"*The Forecast* Plays 20 Questions with Josefina Tranfa-Abboud" in *The Forecast*, National Association of Forensic Economics (NAFE), Volume 33, Issue 3. Summer 2018.

### Working Papers

"Assessing Economic Damages in Employment Disputes: Case Studies on the Applicability of Front Pay." Presented at the National Association of Forensic Economics (NAFE) Annual Meeting held during the Allied Social Sciences Association 2021 Annual Meeting – Chicago (virtual conference) January 2021.

"FLSA Claims and Fraud: Recent cases and Analytics in Patterns of Overtime." Presented at the Eastern Region Conference of the National Association of Forensic Economics (NAFE) Virtual Conference, February 2021.

### Presentations

Panel Discussion: Small Business Roundtable: "Issues Impacting Small Business Owners and their Employees". Presented "The Impact of Litigation on Business Owners". Rothman Institute of Innovation and Entrepreneurship, Silberman College of Business, Fairleigh Dickinson University, April 2021.

FLSA Claims and Fraud: Recent cases and Analytics in Patterns of Overtime. Eastern Region Conference of the National Association of Forensic Economics (NAFE) held during the Annual Eastern Economic Association Virtual Conference, February 2021.

Assessing Economic Damages in Employment Disputes: Case Studies on the Applicability of Front Pay. National Association of Forensic Economics (NAFE) Annual Meeting held during the Allied Social Sciences Association 2021 Annual Meeting – Chicago (virtual conference) January 2021.

Discussant for the paper titled "What do Women FEs Want – The Survey of NAFE Women Forensic Economists" by Nora Ostrofe. Eastern Region Conference of the National Association of Forensic Economics (NAFE) held during the Annual Eastern Economic Association Meetings - Boston, MA. March 2020.

Discussant for the paper titled "Unretirement in the 2010s: Prevalence, Determinants, and Outcomes" by Kevin Cahill. Southern Region Conference of the National Association of Forensic Economics (NAFE) held during the Annual Southern Economic Association Meetings – Ft. Lauderdale, FL. November 2019.

Damages in Employment Disputes. Eastern Region Conference of the National Association of Forensic Economics (NAFE) held during the 44<sup>th</sup> Annual Eastern Economic Association Meetings - Boston, MA. March 2018.

Economic Damages, Economic Analysis, and Forensic Data Examinations. Eastern Region Conference of the National Association of Forensic Economics (NAFE) held during the 43<sup>rd</sup> Annual Eastern Economic Association Meetings - New York, NY. February 2017.

Panel Discussion: Recent Developments in Defense Practice. Eastern Region Conference of the National Association of Forensic Economics (NAFE) held during the 42<sup>nd</sup> Annual Eastern Economic Association Meetings – Washington D.C. February 2016.

Economic Damages in Wrongful Death Claims: Legal Framework and Working with the Economic Damages Expert. Presentation with Gerard H. Hanson, Esq., Hill Wallack LLP – Presentation for the In-House Counsel Seminar, New Jersey Law Journal. September 2015.

Damages in Employment Disputes: Analysis Before Calculations. Presentation to Day Pitney LLP. November 2014.

Estimating Economic Damages in Personal Injury and Wrongful Death: Analysis First, Projections Follow. Presentation to the Law Office of Leon Kowalski. November 2014.

Employment Litigation: The “Damages Only” Expert and Elements of Liability”. Presentation with Paul F. Millus, Esq., Meyer Suozzi English & Klein, P.C. – Presentation for the Master the Practice CLE Seminar, New York Law Journal. October 2014.

“Tax Liability of Awards and Settlements: Personal Injury and Wrongful Death”. Presentation with Laura LaForgia, CPA, Marks Paneth LLP, New York, NY. December 2013.

“Constructive Discharge: Building the Case for Reasonable Economic Damages”. Webinar Presentation for the New York Law Journal, New York. Presentation with Donna A. Napolitano, Esq. of Berkman, Henoch, Peterson, Peddy & Fenchel, P.C. of Garden City, New York and Thomas Anthony Ricotta, Esq. of White, Ricotta & Marks, P.C. of Jackson Heights, New York. October 2013.

“The Affordable Care Act (ACA): Is Your 2014 Healthcare Strategy Compliant? Is Your HR Data Ready and Reliable?” Marks Paneth & Shron LLP, New York, NY. Joint Seminar Presentation with Alan Hahn of Davis & Gilbert LLP, New York City. May 2013.

“An Introduction to the Operations of CPLR §4545 Article 50-A and Article 50-B: Statutory Computations from the Perspective of the Economic Expert.” CLE Program - Presentation for the New York Bar Association, Long Island, New York. April 2013.

“Commercial Damages: Central Analytical Issues and Relevant Information”. Presentation for McElroy Deutsch Mulvaney & Carpenter LLP, Morristown, New Jersey. July 2012.

“Strategic Options in Employee Relations”. Marks Paneth & Shron LLP, Financial, Litigation, Accounting and Tax (F.L.A.T.) Seminar Series. Marks Paneth & Shron LLP, New York, NY. Joint Seminar Presentation with Stephen F. Ruffino and Stephen J.O. Maltby of Gibney Anthony & Flaherty LLP. June 2012.

“Lost Profits Disputes: Foundation for Reasonable Economic Damages”. NJ Law Journal’s In-House Counsel Seminar, Brooklake Country Club, Florham Park, New Jersey. Presentation with Stuart M. Lederman, Esq., Riker, Danzig, Scherer, Hyland, Perretti, LLP. March 2012.

### **Other Speaking Engagements**

Panel Discussion Moderator: “Navigating a Career in Forensic Economics” – 96<sup>th</sup> Annual Conference of the Western Economic Association International. NAFE Virtual Sessions June 27-28, 2021.

“Financial Fitness - A Mid-Year Review”. Financial Women’s Association - New Jersey. June 2013.

Panel speaker for the program “Navigating New Jersey’s Small Business Economy, Thriving in Challenging Economic Times”, Fairleigh Dickinson University, Rothman Institute of Innovation and Entrepreneurship. October 2019.

#### Ph.D. Dissertation

“Structural Changes in the Norwegian Farm Sector: And Empirical Study of Worker Adjustment Costs to Leaving Agriculture”. Summer Semester 1998.

#### Professional Associations and Memberships

National Association of Forensic Economics  
American Academy of Economic and Financial Experts  
National Association of Certified Valuers and Analysts  
Association of Certified Forensic Examiners  
Financial Women’s Association

#### Honors and Awards

- Merit Scholarship for graduate studies in Economics in the United States, granted by Fundacion Gran Mariscal de Ayacucho, Caracas, Venezuela 1992 – 1998.
- Nominated for “Outstanding Teaching Assistantship Award 1998”, Economics Department, Florida State University, 1998.

#### Volunteer and Community Service

- National Association of Forensic Economics (NAFE)
  - Chair: Women of NAFE Committee 2021 / Membership sub-committee
  - Nominating Committee 2020
  - Nominating Committee 2018
  - Committee for the Review of the NAFE’s Ethics Statement 2017: Statement of Ethical Principles and Principles of Professional Practice (SEPPPP) of the National Association of Forensic Economics
- Newark Academy, Livingston, NJ: Newark Academy Parents Association Executive Board
  - Co-Chair: Engagement, Equity, and Inclusion committee
  - Chair: Annual Fund liaison
- FWA of New York:
  - FWA in NJ: Volunteer on various sub-committees and chaired various events 2014-2017
  - Former Co-Chair FWA Mentoring Program for Stillman School of Business of Seton Hall University, Academic years 2015-2016, 2016-2017
  - Mentor, Academic Year 2020-2021



Deposition and Trial Testimony

| <u>Jurisdiction</u>  | <u>Case Name</u>  | <u>Appearance</u> |
|--|---|-------------------|
| American Arbitration Association<br>August 2021                                | Danielle Malecek v.<br>Red Hat, Inc.  | Deposition        |
| Superior Court of New Jersey<br>Law Division<br>Middlesex County<br>March 2021 | Ryan Kent v.<br>NuVasive, Inc.<br>NuVasive Clinical Associates,<br>American Neuromonitoring Associates,<br>Impulse Monitoring, Inc.<br>Shawn L. Masia, M.D.,<br>Shawn L. Masia, M.D., P.C., and<br>Kaye Griffin, R. EP T., CNIM | Deposition        |
| American Arbitration Association<br>October 2018                               | Jose Hernandez v.<br>NGM Insurance Company  | Arbitration       |
| Supreme Court of New York<br>County of Bronx<br>May 2018                       | Alex Reyes and Alex Barcelona v.<br>Eric J. Acevado, Chen Seng Tan and<br>Little Richie Bus Service, Inc.   | Trial             |
| Supreme Court of New York<br>County of Queens<br>September 2016                | Alfred B. Boland and Linda Boland v.<br>Courtesy Bus Co, Inc. and Manuel Sulca  | Trial             |
| Supreme Court of New York<br>County of Kings<br>September 2016                 | Sammy Baum, an infant, by his father and<br>natural guardian, Ari Baum, and Ari Baum,<br>Individually v. Ziad A Milad and Marble<br>Lite Inc.   | Trial             |
| Supreme Court of New York<br>County of Nassau<br>August 2016                   | Frank Cristo and Mezza on the Green, Inc.<br>v. The Incorporated Village of Lawrence,<br>Martin Oliner, Joel A Mael, Michael A<br>Fragin, David E. Smollett,<br>and Leo McMahon   | Mediation*        |
| Supreme Court of New York<br>County of Bronx<br>January 2016                   | Eugene Stolorski and Brigid Stolorski,<br>et al. v. 234 East 178 <sup>th</sup> Street LLC and<br>The City of New York   | Trial             |
| Supreme Court of New York<br>County of Kings<br>November 2015                  | Inna Grechko, Ind. and as Adm. of the<br>Estate of Piotr Grinberg, Deceased, et al.<br>v. Maimonides Medical Center, et al.   | Trial             |

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| United States District Court<br>Eastern District of New York<br>June 2015    | Sally S. Neumann v.<br>Wyandanch Union Free School District  | Deposition |
| Supreme Court of New York<br>County of Nassau<br>November 2014               | Nassau Regional Off-Track Betting<br>Corporation v. KRD Media, LLC<br>and Dot Digital Networks, Inc.                                     | Trial      |
| United States District Court<br>Eastern District of New York<br>May 2014     | Christopher Barrella v. Village of<br>Freeport and Andrew Hardwick as both<br>Mayor and in his individual capacity.                      | Trial      |
| Supreme Court of New York<br>County of Queens<br>January 2014                | Monique Hines v. Angel A. Lopez,<br>Varsity Bus Co., Inc., Logistic Associates,<br>Inc., City of New York, et al.                        | Trial      |
| United States District Court<br>Eastern District of New York<br>October 2013 | Wayne Chrebet v. County of Nassau,<br>Paul Szymanski, Bohdan Pilczak,<br>Scott Tusa, et al.  | Deposition |
| United States District Court<br>Eastern District of New York<br>July 2013    | Willie Warren v. County of Nassau,<br>Nassau County Department of Public<br>Works, Thomas R. Suozzi, et al.                              | Trial      |
| United States District Court<br>District of New Jersey<br>March 2013         | Federal Trade Commission v. Lane<br>Labs-USA, Inc., et al  | Deposition |
| Supreme Court of New York<br>County of Kings<br>November 2012                | Bina Thakoordyal, as Administrator of the<br>Estate of Permaul Tulkanam v.<br>Varsity Bus Co. Inc. and Elliot A. Eustace                 | Trial      |
| United States District Court<br>Eastern District of New York<br>October 2012 | Matthew Prince v. County of Nassau,<br>John Fitzgerald, Lieutenant, Nassau County<br>Police Department, 1 <sup>st</sup> Precinct, et al. | Trial      |
| Supreme Court of New York<br>County of Bronx<br>February 2011                | Eric Berrios v. 735 Avenue of the<br>Americas, LLC and Plaza Construction<br>Corporation   | Trial      |
| Supreme Court of New York<br>County of Queens<br>January 2011                | Robert Pattison and Kristin Murray v.<br>The City of New York, Keyspan Corp.,<br>Consolidated Edison Co. of NY et al.                    | Trial      |
| Supreme Court of New York<br>County of Kings<br>November 2010                | Christopher Harrison v.<br>Maurice Andre Bailey, et al.  | Trial      |

Superior Court of New Jersey  
Sussex County: Law Division  
April 2010

Mary Ann Pearsall v.  
Christopher Okechukwu, MD, et al.

Deposition